# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/826,299 | 04/19/2004 | Sung-hi Lee | 1349.1357 | 9802 |

21171     7590     01/09/2008
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

| EXAMINER |
|---|
| SARPONG, AKWASI |

| ART UNIT | PAPER NUMBER |
|---|---|
| 4178 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 01/09/2008 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.  2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 April 2004* is/are:  a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All  b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *04/19/2004 AND 06/13/2005*.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

# DETAILED ACTION

## *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form

the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1.      Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by

Tomita (2003/0035132).

**Claim 1,** Tomita discloses a printing apparatus to perform a printing operation by

driving hardware provided thereto according to a printing command received from a

user (Section 0071, Fig. 3), comprising:

a firmware unit to store function information of a plurality of models of the printing

apparatus (Section 0125 and 0126) and selectively perform the function of one of the

plurality of models which corresponds to a model index designated as the printing

apparatus is initialized (Section 0127 and 0128, Fig. 6 El. 901 and 902).

**Claim 2**, Tomita discloses a printing apparatus wherein the firmware unit comprises:

a storage unit to store the function information of the plurality of models therein (Section 0127 and 0128);

a model index processing unit to store a model index designation command received from outside the firmware unit, extract from the storage unit the function information which corresponds to the model index designated by the model index designation command upon the initialization of the printing apparatus, and output the extracted function information (Section 0127, Fig. 6, El 901).

a firmware driving unit to control the hardware to receive the function information and perform a corresponding function (Section 0092 and 0104, Fig. 4 El. 121 and 131).

**Claim 3,** Tomita discloses a printing apparatus wherein the firmware unit further comprises:

a data receiving unit to receive data from outside the firmware unit, and transmit the model index designation command to the model index processing unit in response to the model index designation command being in the received data; (Section 0094 and 0105, Fig. 4 El. 145 and 135)

a data processing unit to receive the data excluding the model index designation command from the data receiving unit, and convert the data into corresponding printer language (Section 0071, Fig. 4 El. 121) and

a data printing unit to control the hardware to output the converted data onto a

printing medium (Sections 0073 and 0074, Fig. 3 El. 180).


**Claim 4,** Tomita discloses a printing apparatus that further comprising a

developing unit and a fusing unit to output the converted data onto the printing medium,

wherein the developing unit and the fusing unit are controlled by the data printing unit

(Section 0074, Fig. 3).


**Claim 5,** Tomita discloses a printing apparatus wherein the model index

designation command is transmitted along with initialization files through a printer

interface during the manufacturing of the printing apparatus, so that the model index

designation command is processed upon the initialization of the printing apparatus

(Section 0201, Fig. 7).


**Claim 6,** Tomita discloses a printing apparatus wherein the model index

designation command is transmitted in a separate command file that is transmitted

through a printer interface to be processed by the firmware unit (Section 0131-0137,

Fig. 7).


**Claim 7,** Tomita discloses a method of supporting a plurality of models of a

printing apparatus by a common firmware, the method comprising:

confirming a model index designation command which designates a model index

corresponding to one of the plurality of printing apparatus models (Section 0125 and

0126, Fig. 6);

extracting function information corresponding to the one of the plurality of printing

apparatus models which is designated by the model index designation command;

confirming a function of the designated model using the function information; and

performing the function (Section 0127, Fig. 6, El. 901).

**Claim 8,** Tomita discloses a method further comprising inputting the model index

designation command and storing the command in an initialization file; and

confirming the model index designation command by executing the initialization file

(Section 0202, Fig. 15).

**Claim 9,** Tomita discloses a method that further comprising writing a separate file

which stores therein the model index designation command storing the file in the

printing apparatus through a printer interface; and confirming the model index

designation command by executing the file (Sections 0204, 0205 and 0206, Fig. 15).

**Claim 10,** Tomita discloses a method wherein the function of a basic model that

is previously set is performed in response to there being no function information

corresponding to the designated model index (Sections 0204, 0205 and 0206, Fig. 15).

**Claim 11,** Tomita discloses a firmware unit to control a printing apparatus,

wherein the firmware unit stores function information of a plurality of models of the

printing apparatus, and controls the printing apparatus according to the function

information corresponding to the printing apparatus (Section 0125 and 0126, Fig. 6)

**Claim 12,** Tomita discloses a firmware unit, further comprising a storage unit to

store the function information of the plurality of models of the printing apparatus

(Section 0126, Fig. 904).

**Claim 13**, Tomita discloses a firmware unit that further comprising a model index

processing unit to store a model index designation command received from outside the

firmware unit, extract the function information corresponding to a model index

designated by the model index designation command, and output the extracted

information. (Section 0127, Fig. 6 El. 901).

**Claim 14,** Tomita discloses a firmware unit that further comprising a data

receiving unit to receive data from outside the firmware unit, and transmit the model

index designation command to the model index processing unit in response to the

model index designation command being in the received data (Section 0127, Fig. 6 El.

901).

**Claim 15,** Tomita discloses a firmware unit that further comprising a data

processing unit to receive the data excluding the model index designation command

from the data receiving unit and convert the data into corresponding printer language

(Section 0050, Fig. 1 El. 12).

**Claim 16,** Tomita discloses a firmware unit that, further comprising a data

printing unit to control hardware of the printing apparatus to output the converted data

onto a printing medium (Section 0091 and 0092, Fig. 127).

**Claim 17,** Tomita discloses a firmware unit that further comprising a firmware

driving unit to control hardware of the printing apparatus to receive the function

information and perform a corresponding function (Section 0126, Fig. 6 El. 904).

**Claim 18,** Tomita discloses a method of controlling a printing apparatus, the

method comprising:

storing function information of a plurality of models of the printing apparatus in

the printing apparatus,  (Section 0126, Fig. 6 El. 904).

controlling the printing apparatus according to the function information

corresponding to the printing apparatus (Section 0127, Fig. 6 El 901).

**Claim 19,** Tomita discloses a firmware to control a plurality of models of a

printing apparatus, wherein the firmware installed in the plurality of models of the

printing apparatus comprises function information of each of the plurality of models, and controls each of the plurality of models according to function information corresponding to each of the respective models (Section 0125 and 0126, Fig. 6 El. 904).

**Claim 20,** Tomita discloses a firmware to control a plurality of models of a printing apparatus, comprising: a plurality of model index functions (Section 0125 and 0126);

wherein the firmware controls the models of the printing apparatus according to a respective one of the model index functions designated in response to a model index command (Section 0126 and 0127).

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKWASI M. SARPONG whose telephone number is (571)270-3438. The examiner can normally be reached on Monday-Friday 8:00am-5:00pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HAI Tran can be reached on 571-272-7305. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


AMS
01/03/2008.

/Hai Tran/
Supervisory Patent Examiner, Art Unit 4178